# **BIOLOGY 3: Natural History Approach to Biology**

Instructor: Mr. Bryon P. Spicci
Office Hours: By Appointment Only

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E-mail: <u>bryon.spicci@reedleycollege.edu</u> or <u>quizzler2@scccd.org</u> Class Meetings: M - Th from 9:00 am-12:25 pm from 6/29/09 – 8/7/09.

#### I. COURSE DESCRIPTION

**A. Title:** Biology 3 – Natural History Approach to Biology

- **B.** Prerequisite: Eligibility for English 125 and 126. You will also need the desire to learn and the ability to drive yourself to field trips.
- C. Summary: Biology 3 is a Natural History approach to Biology. It is an integrated approach using ecology to establish the interrelationships between plants, animals, man and the planet earth. Emphasis is placed on local flora & fauna, biotic communities and field trips. This class is recommended for the non-science and pre-education majors. Biology 3 satisfies the general education science requirement.

#### II. COURSE OBJECTIVES

- **A**. Students will read, analyze, evaluate, and discuss the Scientific Method, Microscopy, The cell, and Levels of Organization.
- **B.** Students will learn the periodic table of the elements and chemistry of the carbon atom and chemical structure of living organisms.
- C. Students will read appropriate scientific literature on classification.
- **D.** Students will learn the cell's structure, function, and organization of living organisms.
- **E.** Students will observe and document the structure and function of the human body by examining the organ systems: reproduction, respiration, circulation, excretion, and digestion.
- **F.** Students will review classical and molecular genetics and learn the process of replication, transcription, and translation.
- **G.** Students will perform experiments, observe, and record data.
- **H.** Students will learn plant structure, physiology, and interaction including photosynthesis and aerobic respiration.
- I. Students will study evolution.
- **J.** Students will observe chemical and energy relationships.

# III. REQUIRED MATERIALS:

- 1. Text: Tobin, A., Asking about Life, 3<sup>rd</sup> edition (2005) Brooks/Cole Publishing.
- 2. Text: <u>Sierra Nevada Natural History</u>, revised Ed. Storer, T., Usinger, R., & Lukas, D. Univ. of California Press. 2004.
- 3. Scantron form 882 (X5), Scantron form 815-E for the lecture guizzes.
- 4. E-mail address. This can be obtained free through the school
- 5. Biology Drawing Paper, one 4H and one 2H pencil, for lab plates
- 6. Camera for field trips

### IV. OPTIONAL, BUT RECOMMENDED:

- 1. Colored pencils (hard graphite) (no flow pens or crayons)
- 2. Binoculars for field trips

# V. NO FOOD, BEVERAGE, CELLULAR PHONES, DISRUPTIONS OR PROFANITY AT ANY TIME!!!

Hint!! Be sure to always put your name, code & lab day on all papers to insure you will not get 5 points deducted! Thanks!!

**Summer 2009** 

#### VI. ATTENDANCE:

You are expected to be on time for each laboratory and lecture session. Tardiness may be construed as an absence from the class. It is the student's responsibility to see the instructor after class to be sure that an absence has been changed to a tardy! Be aware that 3 tardies = 1 absence. This is very important because **if you miss more hours than 5 hours of class or lab, you will be dropped** unless your instructor has been informed of the extenuating circumstances causing your absences.

#### VII. TESTS AND EVALUATIONS:

A. Grading (Note that this is an approximation)

Description	Points Possible
Lab Exercises (approx. 14)	140
10 Lab Plates (drawings) (10 pts. each)	100
10 Lecture Quizzes (10 @ 10 pts. each)	100
Unannounced Pop Quizzes (10 @ 10 pts each)	100
Lab quizzes (3 @ 50 points each)	150
5 Exams (100 pts. each) lowest score dropped	400
Discussion Board	100
Photo Essay Project	100
Approximate Total Points =	1190

# \*\* I reserve the right to make changes in this syllabus with notification \*\*

B. In *most* circumstances the curve for the class is taken from the top grade in the class as long as the top grade is 90% or more from the points possible.

(From the top grade) 
$$90\% = A$$
  $80\% = B$   $65\% = C$   $55\% = D$   $54\%$  and below = F

At any point you can check your grades on webgrade via our Blackboard site:

http://www.blackboard.reedleycollege.edu go to the webgrade section and click on 'webgrade' to view your grades. You are encouraged to check this site regularly and keep track of your own grades! Your Blackboard username and password is your 7 digit student ID number. Your webgrade password will be emailed to you by your teacher. Additionally, all handouts and class notes for our class will be available on this site.

- C. *Exams* will include multiple choice questions, true/false, matching, fill in the blank and usually 3-5 short essay questions. Many times these essays will be the main objectives of each chapter. All exams will be closed book and no notes.
- D. Lab Exercises Grades will come from your lab work itself. These are to have the answers to laboratory questions on handouts or from your lab guide as well as any problems to work or tables to fill in. Be sure these are neatly done and in the same order as the handouts. Forgotten lab work means no score as you are responsible for your work. Policy for missed labs: If a lab is missed you will not be allowed to make it up. Attending the lab is mandatory. No points will be given for lab work if you were not present during the lab meeting.
- E. Lecture Quizzes will consist of questions concerning the previous lectures and/or the current day's lecture. These quizzes are closed book and no notes. Quizzes missed due to **tardies may NOT be made up**. Quizzes may also be given at the **end of a laboratory or lecture**. Attendance pop quizzes may also be given at any time either at the beginning, during or at the end of class. You need to be in class at your seat ready to start work when those are given.

- F. Lab Plates (drawings) will be due, without notice, at the beginning of the next lab. Approximately 10 plates will be collected throughout the semester, which will roughly total one exam. Extra time and neatness as well as accuracy are very important to a successful laboratory grade. See the LAB DRAWING HAND OUT for more details on how the lab drawings will be graded. Drawings that are not on the required Biology drawing paper will not be graded. Keep all graded and ungraded lab plates in a lab notebook. Late lab plates will not be graded.
- G. *Lab quizzes* will also be given at various times during the summer semester. There will be three lab quizzes. Each one is worth 50 points. Your instructor will tell you more about them later
- H. The PhotoEssay project will require you to travel into the mountains to conduct independent research. You will be responsible for providing your own transportation. More will follow on this later.
- I. *Discussion Board*: There will be questions based on assigned readings from the two texts used in this class. On blackboard these questions will be posted on the class discussion board. You will be expected to answer these questions on the discussion board. There will be approximately 10 discussion topics. Each posting will have its own point total listed

# VIV. Help:

If you should have difficulty grasping the material presented during the course be sure to see your instructor at the first sign of trouble. Often, a few minutes can clear up many problems! If you are having trouble studying, perhaps you need a few study hints or a tutor at the Tutorial Center. Please come in for help! Always keep in mind that this is a four-unit course. As a general rule, each hour of lecture requires two hours of additional study outside of the classroom each week. Each hour of lab requires one hour of study time, outside the laboratory each week. This equals eight hours of study each week in order to pass—this class. Do your planning accordingly.

Success comes before work only in the dictionary. Overall, I hope you have a fun semester and learn Biology along the way. Good Luck.

# X. Academic Dishonesty

Academic dishonesty is unacceptable and will not be tolerated by Reedley College. Cheating, plagiarism and collusion in dishonest activities erode the college's educational and social role in the community.

**Cheating** is the act of deception by which a student misleadingly demonstrates that he/she has mastered information on an academic exercise. Examples include but are not limited to:

- 1. Copying or allowing another to copy a test, paper, project, or performance.
- 2. Using unauthorized materials during a test, for example, notes, formula lists, or "cheat sheets."
- 3. Taking a test for someone else or permitting someone to take a test for you.

**Plagiarism** is the act of representing the work of another as one's own without giving credit. Plagiarism includes but is not limited to:

- 1. Incorporating the ideas or words of another's work without giving appropriate credit.
- 2. Representing another's artistic or scholarly works, such as musical compositions, computer programs, photographs, etc., as one's own.

Disciplinary Procedures are outlined in your Reedley College student catalog and are summarized as follows when a faculty member discovers a violation:

- 1. Conference with student to address allegations
- 2. Notification of division dean, report for permanent record of student.
- 3. May give student "F" for assignment or course.
- 4. If more than one infraction has occurred, the student may go on probation, be suspended, or expelled. An appeal may be made within 15 days of notification.